Editor and referees comment:

Enhance the discussion part! It should be more convincing and include the comparison of your results with previous studies and discuss the advantages of your method. The current comparison is not clear."

We thank the editor and referees for their valuable comment. The following revisions have been made.

-- We did try to illustrate the advantages of the proposed method in “Introduction” and “Discussion” parts. In fact, there are few papers about the effects of storm movement on rainfall-runoff modeling under real conditions; therefore, the results are compared with the studies using laboratory or mathematical approaches, where the rainfall characteristics can be controlled. However, their results may not be applicable in real basins. The study provided a useful method to cope with rainfall movement in runoff modeling of sparsely gauged large watersheds.

-- To highlight the advantage. Extra contents are added. Please refer to line 19-21, 67-71, 204-212, 240-242.

-- The title was also changed to more precisely reflect the contribution of the paper.

-- Some mistakes in references were modified. Please refer to line 252, 256, 274 and 315.